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- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) **Date of publication of the international search report:**
14 April 2005

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/02122

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : E21B 43/10
US CL : 166/380,384,207,242.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 166/380,384,207,242.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
none

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	US 6,557,640 B1 (COOK et al) 06 May 2003 (06/05/2003), see entire document.	1-3,6-9,12-15,18-37,65,66,68,70-72,125-128,138,141-145 and 147-151
XP	US 6,568,471 B1 (COOK et al) 27 May 2003 (27/05/2003), see entire document.	21-23,43-45,65 and 66

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"Z" document member of the same patent family

Date of the actual completion of the international search

19 August 2004 (19.08.2004)

Date of mailing of the international search report

24 FEB 2005

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/02122

Continuation of B. FIELDS SEARCHED Item 3:
EAST

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